

IN THE DRAWINGS:

Please replace Figure 16 with the attached “Replacement Sheet” for Fig. 16.

The replacement sheet includes the words “PRIOR ART”.

REMARKS

This application has been carefully reviewed in light of the Office Action dated July 6, 2006. Claims 1 to 7 are in the application. Claim 1 is independent. Reconsideration and further examination are respectfully requested.

The Office Action entered an objection to Figure 16 for formalities.

Applicant submits herewith a replacement sheet for Figure 16, in which the words "PRIOR ART" have been added. Withdrawal of the objection is respectfully requested.

Claims 1 to 5 and 7 were rejected under 35 U.S.C. § 102(e) over U.S. Patent Application Publication No. 2002/0167013 (Iwasaki); and Claim 6 was rejected under 35 U.S.C. § 103(a) over Iwasaki in view of U.S. Patent Publication No. 2001/0032984 (Uchida). Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention is directed to a photonic circuit board. Among its many features, the photonic circuit board includes a reconfigurable integrated circuit connected to a plurality of optical I/O devices, and a mediating device for transmitting a signal to the reconfigurable integrated circuit such that the reconfigurable integrated circuit changes a mode of connection among a plurality of electronic devices and the plurality of optical I/O devices in accordance with the signal.

Referring specifically to the language of the claims, independent Claim 1 defines a photonic circuit board. The photonic circuit board comprises a two-dimensional optical transmission medium for transmitting optical signals, a plurality of optical I/O devices connected to the two-dimensional optical transmission medium, a reconfigurable integrated circuit connected to the plurality of optical I/O devices, and a group of electric wires connected to the reconfigurable integrated circuit, the electric wires being adapted for

connecting a plurality of electronic devices to the reconfigurable integrated circuit. The photonic circuit board also comprises a mediating device for transmitting a signal to the reconfigurable integrated circuit such that the reconfigurable integrated circuit changes a mode of connection among the plurality of electronic devices and the plurality of optical I/O devices in accordance with the signal.

The applied references are not seen to disclose or to suggest the features of independent Claim 1, and in particular, are not seen to disclose or to suggest at least the feature of a mediating device for transmitting a signal to a reconfigurable integrated circuit such that the reconfigurable integrated circuit changes a mode of connection among a plurality of electronic devices and a plurality of optical I/O devices in accordance with the signal.

Iwasaki is seen to disclose an optoelectronic substrate having an electronic device, an optical device, and an optical wiring layer that is comprised of a periodic structure. (abstract of Iwasaki). However, Iwasaki is not seen to disclose or to suggest a mediating device for transmitting a signal to a reconfigurable integrated circuit such that the reconfigurable integrated circuit changes a mode of connection among a plurality of electronic devices and a plurality of optical I/O devices in accordance with the signal.

Uchida is seen to disclose an optoelectric integrated device that includes a three-dimensional solid semiconductor crystal and a plurality of optical devices. (abstract of Uchida). However, Uchida is not seen to disclose or to suggest a mediating device for transmitting a signal to a reconfigurable integrated circuit such that the reconfigurable integrated circuit changes a mode of connection among a plurality of electronic devices and

a plurality of optical I/O devices in accordance with the signal. Accordingly, independent Claim 1 is believed to be allowable.

The other claims in the application are each dependent from the independent claim and are believed to be allowable over the applied references for at least the same reasons. Because each dependent claim is deemed to define an additional aspect of the invention, however, the individual consideration of each on its own merits is respectfully requested.

No other matters being raised, it is believed that the entire application is fully in condition for allowance, and such action is courteously solicited.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

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